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Fragments for a medieval theory of prosthesis

In Surgery *Prosthesis* is taken for that which fills up what is wanting, as is to be seen in fistulous and hollow Ulcers, filled up with Flesh by that Art: Also the making of artificial Legs and Arms, when the natural ones are lost.¹

Phillips's New World of Words (1706)

In between its sixteenth-century appearance in English as a grammatical term and its later use to mean 'the making of artificial Legs and Arms' lies another meaning of prosthesis. As *Phillips's New World of Words* describes, in surgery prosthesis is 'that which fills up what is wanting [...] with Flesh'. *Phillips's* 1706 dictionary definition is offered by the *OED* as early evidence of the use of prosthesis to mean 'the replacement of defective or absent body parts of the body by artificial substitutes', but in *Phillips's* definition this sense (at least syntactically) is itself an apposition, arising out of or adding to its primary sense as an art of making flesh. The prosthesis of the flesh is persistently absent from contemporary critical and philosophical engagements, and yet it is one with a long history reaching back (at least) to Galen and extending up through Paré.

In the medieval period, the surgical art of making flesh is termed, not prosthesis, but 'incarnatyf' medicine.² In this tradition flesh emerges as a natural prosthesis in the body, filling in gaps as well as substituting for other parts of the body, especially skin. As a fifteenth-century Middle English translation of Lanfrank's surgical treatise (*'Science of Chirurgie'*) records, the kinds of flesh in the body are three-fold: further to the 'gandelose [glandular]' flesh (in the breasts or

testicles, for example) and the ‘brawny [muscular]’ flesh, is ‘symple fleisch’ whose ‘helpinge is to fulfille þe voide placis of smale lymes to brynge hem [them] to a good schap’.³ It is this capacity to fill up hollow, empty spaces in the body that particularises the role of flesh. Albertus Magnus’s *De animalibus* thus similarly records how flesh ‘fills up the gaps between the uniform and instrumental members and flows in and out of them and heals their injuries’ (‘quae su[p]plet vacua membrorum similium et instrumentalium, et haec influit et effluit et abrasa recrescit [lit. ‘regrows what has been scraped away (or, destroyed)’]’).⁴ The Latin verb used by Albertus to describe the function of flesh in the body is *suppleo*, ‘to fill up, make full or whole’ or ‘to complete’, which forms the root of the noun *supplementum*, or in Modern English *supplement* (*OED*, s. v. ‘to make good a deficiency; an addition or continuation’). It is this natural capacity for flesh to supplement that surgical theory utilises and artificially enhances in its treatment of the wounds or diseases that disrupt the continuity of the body.

Understanding flesh, or making flesh, as a form of prosthesis suggests the originally ‘supplemental or technical character of the body’ as modern philosophies of prosthesis also do, but it reframes its terms – away from language and rhetoric, and away from technical and technological prosthetics⁵ – to questions of the matter of the body itself.⁶ This essay is thus a kind of prolegomena for a missing history of flesh as prosthesis, a history which the medieval period in part supplies. It begins by establishing medieval understandings – inherited from classical and Arabic traditions and mediated in part by the medieval scholastics – of flesh and of ‘incarnatyf’ medicine in Middle English surgical treatises, in which flesh emerges as radically different from the body and thus as capable of supplementing, or substituting for, its parts. Two examples show the currency of ‘incarnatyf’ medicine outside of the surgical tradition. The first is a miracle of Cosmas and Damian. The miracle the saints perform takes up surgical theory, but extends its prosthetic logic beyond generating new flesh to substitute for missing parts within the body to exchanging flesh and parts *between* bodies. The second is a series of visions in the *Liber*

Celestis, a Middle English translation of Bridget of Sweden's *Revelations* (prepared partly as evidence for her canonisation), where Christ himself is a practitioner of 'incarnatyf' medicine, fashioning those who are his friends into his own prosthetic arm. These fragments for a history of flesh as prosthesis raise questions about what belongs to the body, to the individual, to the human; about the relationship of self and other, of life and death, and of the living and the dead, but also, in a highly medieval way, of the human and the divine. So too do they ask questions about both the possibilities and the limits of prosthesis – as supplement, or substitute, or as implant – particularly as a metaphor for community and for the body of Christ himself. Together these fragments suggest that flesh – archetypally – functions in the way the supplement does for Jacques Derrida: 'the supplement supplements. It only adds to replace. It intervenes or insinuates itself in-the-place-of; if it fills, it is as if one fills a void. If it represents [...] it is by the anterior default of a presence. Compensatory and vicarious, the supplement is an adjunct, a subaltern instance which takes-(the)-place'.⁷ Derrida's characterisation of the supplement offers a productive way of thinking about prosthesis in the three fragments I consider here: flesh as prosthesis not only vicariously fills the void, but it also performs the work of that which it replaces.

Flesh as prosthesis

In medieval taxonomies of the body, flesh and fat are radically different from the rest of the simple members (bones, nerves, skin, etc.) that make up the body. In the Galenic tradition, mediated by Arabic surgeons and followed by surgeons in the medieval west, flesh is categorised as sanguine in contradistinction with other simple members that are, instead, spermatik.⁸ This difference is crucial for medieval beliefs about both the continuity and survival of the body. As a Middle English translation of Guy de Chauliac's *Cyrurgie* records: 'some membres beþ [are] spermatik, for þei haue her [their] springynge of þe sparne [sperm], to þe whiche is noþer

[neither] generacioun [regeneration] ne verray [nor true] consolacioun'.⁹ Lanfrank's treatise similarly elaborates that spermatic members such as 'boonis [bones], pelliculis [membranes], gristlis [cartilage], ligamentis & skyn', because they are derived from 'þe sperme of þe fadir [father] & of þe modir [mother]', cannot be restored once cut into or cut off (at least, not in their original form). In contrast, flesh can be newly made in the body from blood: 'fleisch mai be restorid bi cause þat þe blood is engendrid al day in us'.¹⁰ It is the natural properties of flesh that enable the body once injured or wasted through sickness to be repaired or healed.¹¹ It is thus flesh's very (subaltern) difference from spermatic members that enables it to act as a substitute for them.

This prosthetic role of flesh in the body is central to the medieval craft of surgery and its teaching on how 'to ioyne þat is departed'¹² through a process that might broadly be termed 'incarnacioun' or 'incarnatyf' medicine in Middle English, and 'prosthesis' in *Phillips's* 1706 English dictionary.¹³ This process of making new flesh – also variously referred to as 'fleshyng' and 'gendryng' – is one both natural to and artificially produced in the body through the use of bindings ('byndyng incarnatyf (i. to make flesche)'), stitches ('sewyng incarnatyf (i. makynge flesche)'), and 'incarnatyf' medicines.¹⁴ Recalling Avicenna's teaching on the irreplaceable nature of spermatic members, Lanfrank instructs that in cases of a hollow ulcer where 'schal neuere [shall never] be no skyn engendrid þeron', medicines should be used 'to engendre hard fleisch aboue [vt nascatur caro calosa dura], & schal be in þe place of skyn [que est loco cutis], vpon which place nyle neuere [will never] wexe here [grow hair] afterward'.¹⁵ To cure an ulcer the surgeon must 'engender' flesh in order to form a replacement skin. In wounds that result in 'lesynge [loss] of þe skyn', Chauliac similarly instructs (citing the authority of Galen) that: 'It byhouep [is necessary] forsoþe to fynde anoþer entent [method] of curacioun and þat were to wirche in [treat] þe skyn, if it were possible. While þat generacioun of þe skyn is impossible for hardenesse þerof, some þing *is to be made like þe skyn*, þat is to say, harde flesche [aliquid simile

cuti, carnem callosam videlicet, faciendum est]’ (my emphasis).¹⁶ Through medicine, flesh in these instances can both be made and be made *like* skin, and so stand in its place.

Natural and artificial generation of flesh, as the *Cyrurgie* describes, is made through ‘þe congelynge [thickening] of blode materialy and effectuely [*MED*, s. v. ‘As an emanation or embodiment of a “substance” or “quality”’) forsoþe of þe nature’.¹⁷ Incarnative (or regenerative) medicines thus act upon the blood present in wounds or ulcers to generate new flesh. As Chauliac records: ‘A medecyne gendryng flesche, after Avicen [Avicenna], is þat whos proprete [property] is þat it chaunge þe blode and þe bledyng wounde into flesche’.¹⁸ Lanfrank’s *Cirurgie* provides recipes for regenerative medicines that ‘haueþ propriete [have the property] forto congile [congeal] blood, þat comeþ to þe place wiþ tempere drieness [moderate dryness], & makip þerof fleisch’,¹⁹ and consolidating medicines that ‘drieþ wiþ vertu þat is clepid [called] stiptica [*MED*, s. v. a ‘medicinal ingredient which contracts bodily tissue’], þat makip hard fleisch to arise in þe stide [place] of skyn’.²⁰ This prosthetic process whereby flesh substitutes for skin operates through a process of drying, thickening, and hardening blood-made-flesh so that it comes to take on, or embody ‘materialy and effectuely’, skin’s qualities.

‘Incarnatyf’ medicine, however, is required not only to make new flesh but also to enable flesh to bind with flesh or even with non-flesh. This is understood to be achieved through a process of knitting – often defined in Middle English by the verb ‘souden’ (or ‘sowden’) – common to that of grafting and analogous to soldering. Thus Chauliac describes how things are joined together in the body through a ‘mene [medium] of dyuerse kyndes as erramus [a metal-worker] *sowdeþ* [solders] the lede [sicud errarius consolidate plumbum]’ (my emphasis).²¹ Likewise, ‘fleshynges’ medicines should effect a threefold process: ‘to flesche, to gader togidre [gather together] and to *sowde*’ (my emphasis).²² Lanfrank defines the surgical objective to ‘restoren þat, þat is departid’ in equivalent terms: ‘Al þe intencioun of helynge [healing] of woundis is for to *sowden* or to helen’.²³

In pursuing the surgical objective ('intencioun') of joining together what is separate, 'incarnatyf' binding and sewing might be employed. Chauliac, following Avicenna, describes the utility of 'byndynge incarnatyf' in treating 'fresche woundes' and 'brekynges'. This binding should be made with a roll of cloth – preferably linen, as advised by Galen – that is 'brode [broad] and longe after þe kynde [nature] of þe membres'.²⁴ Following the authority of Haly Abbas, Chauliac also describes five different kinds of 'sewing incarnatyf'. The first should be made with strong thread; the second instead 'wiþ a stalke of a feþere [feather] led yn wiþ a fether needle'; the third with pins made of flax; the fourth with hooks; and the fifth, where scarring needs to be minimal as when treating wounds on the face, with cloth anointed with the white of an egg and sewn 'wiþ sotilte [skill]'.²⁵ In each case the stitching should be allowed to 'dwelle' until 'þe wounde be sowded' or until 'perfite [perfect] sowdynge' has been reached.

Flesh's natural properties – its radical difference from the rest of the body, its natural moistness and viscosity – thus enable it to function as a natural form of prosthesis within the body. Within the surgical tradition of 'incarnatyf' medicine, flesh is also regenerated with the artificial means of medicines, as well as cloth bindings, thread stitches, flaxen pins, and hooks, in order to supplement and substitute for lost body parts, to fill in the holes and the hollows. Flesh is thus insistently described in prosthetic terms: it is made to stand 'in þe place of skyn', or 'made like þe skyn', or 'to arise in þe stide of skyn'. Flesh's difference from, but also its capacity to be 'just like' other simple members, makes it a particularly open category in the body. Catenating flesh with cloth, stitches, pins, and hooks, the surgical tradition further raises questions about what is in common between flesh and the material world.²⁶ As the 'incarnatyf' miracle of Cosmas and Damian also suggests, the non-spermatic origin of flesh makes it in some ways detachable from – not particular to – the individual. This raises the possibility that flesh has the potential to be exchanged *between* bodies; part of the body may be replaced with something not proper to it or that comes from outside of it. It therefore also asks profound questions, not only

about what is common between flesh and the material world, but also between the living and the dead, as well as between humans with different coloured skin.

An Ethiopian's leg

The miracle in question appears in a number of vernacular texts, all dating to the late fourteenth or fifteenth centuries, including the *The Gilte Legende*,²⁷ *An Alphabet of Tales*,²⁸ and (in Middle Scots) *The Scottish Legendary*,²⁹ which ultimately stem (in its Latin tradition at least) from the thirteenth-century *Legenda aurea*.³⁰ The story, as it is recounted in *The Scottish Legendary*, is of a man in search of a cure: a 'canker [*cancer*]' (in this instance, probably a 'gangrenous disease of the leg', *MED*, s. v.) has 'sa consumyt [*totum consumpserat*]' his thigh – or in the words of *An Alphabet of Tales* 'wastid it nerehand [almost] away' – that he is become both cripple and beggar.³¹ As he sleeps, the saints Cosmas and Damian (to whom the man has faithfully made his devotions) appear with 'enoymentis [*unguenta*] fresche / & yrnis [*ferramenta*] scharpe to cut ded flesche'.³² Practicing surgeons in life, Cosmas and Damian come (after death) armed, not so much to perform a miracle as to practice 'incarnatyf' medicine, with ointments and surgical instruments ('yrnis' or, in the Latin of the *Legenda aurea*, 'ferramenta [razors]'). As surgical treatises like Lanfrank's and Chauliac's make clear, treatment of a 'canker' requires the surgeon not only to remove the rotten flesh but also to 'cure þe holownesse' first before he 'assayle [attempt] to ioyne [join] it'.³³ As Chauliac emphasises: 'a wounde may nouzt [not] be heled but if þe holownesse be firste fulfilled'.³⁴ And Lanfrank, in instructing how to 'regenere [regrow] fleisch', notes it is necessary to 'fulfille þilke [such] holownes wiþ fleisch or [before] þat þe wounde be heeled'.³⁵ The actions of Cosmas and Damian are therefore consonant with received surgical theory: they seek first to remove the dead flesh and then refill the hole left in the body.

In the miracle that follows, however, the natural prosthesis of flesh and its artificial manipulation in medicine is taken beyond its ordinary bounds. Having removed the dead flesh

from the man's cancerous thigh, the saints discuss how they are to fill up the hole. In the *Legenda aurea* account, one saint asks:

Unde carnes accipiemus, ut, abscissa carne putrida, locum vacuum repleamus. Tunc ait alter: In cimiterio sancti Petri ad Vincula hodie Aethiops recens sepultus est: de illo ergo affer, ut huic suppleamus. Et ecce ad illud cimiterium properavit, et cossam Mauri attulit: praecedentesque cossam infirmi, loco ejus cossam Mauri inseruerunt.

[‘From where shall we take flesh in order that, having cut away the rotten flesh, we may fill up the empty place?’ Then the other said: In the cemetery of St Peter ad Vincula an Ethiopian today was recently buried: from him therefore bring [flesh] that we may supply this [man]. And, behold, he hurried to that cemetery and brought the leg of the Moor and, cutting off the leg of the sick man, inserted in its place the leg of the Moor.]

Recalling Albertus's description in *De animalibus* of the way in which flesh naturally functions – ‘quae su[p]plet vacua membrorum’ – flesh in this miracle is needed to fill up (*repleo*) and supply (*suppleo*) the lack in the man's body. But here the prosthetic capacity of flesh is made to extend *between* bodies in order to substitute for an absent part: the living flesh of a dead man is exchanged for the dead flesh of a living man. Imperceptibly, in the course of the narrative, the procedure shifts from one of incarnation to one of amputation and transplantation: the leg of the Moor is inserted – *inseruerunt* – where the sick man's leg used to be. The verb *insero* means ‘to insert’, ‘ingraft’, as well as ‘to implant’ (*Lewis & Short*, s. v.).³⁶ The prosthetic logic of the miracle thus first suggests flesh as that which is in common, marking (as it does in modern pro-flesh philosophies) something of our shared humanity.³⁷ Secondly, it raises similar questions to those that modern implants and prostheses are understood to also raise – about the boundaries of the human and of the individual, and of the relationship between the animate and the inanimate, but in ways that resist the binary invocations of natural/artificial, living/dead, human/non-human, inside/outside.³⁸

The Middle English versions of the miracle found in the *Gilte Legende* and *An Alphabet of Tales* closely follow the *Legenda* in emphasising the chiasmic principle of exchange. In *An Alphabet of Tales*, the first saint thus asks, ‘Whar sall [shall] we take vs flesh, þat we may fill þe hole with agayn when we hafe cut oute þe rotyn flessh?’ Recalling a man ‘of Ynde [Asia]’ is newly buried that day in the church yard of St Peter ad Vincula, the other suggests they ‘go feche vs of þat, at [that] we may fill þe hole with’. They do so and then ‘cut of þe þe [the thigh] of þe whik [quick] man & þan of þe dede man & putt þe dead mans the [thigh] vnto þe whik mans’.³⁹ As the *Legenda aurea* makes clear, the living man’s leg is also given to the Ethiopian in return. Why, though, is it necessary that the legs are exchanged? Why is the dead man given the living man’s corrupt leg in place of his whole one? The exchange of legs offers, of course, material proof that the miracle has taken place. But it is more than this. As Leonard Barkan discusses, what the English and Latin versions take as implicit, but which a (twelfth-century) Greek version spells out, is that at the Resurrection each man will receive his own leg back. Barkan’s commentary on this rightly emphasises the importance of completion: ‘As the Pauline notion of the resurrection suggests, there is a grand economy in the universal matter of bodies. All the parts must be accounted for [...because the body is] the most fundamental and enduring model of completeness’.⁴⁰ But what the versions of this miracle also work to show in this chiasmic exchange is a relation between life and death that is conveyed in flesh itself, as the version of the miracle in *The Scottish Legendary* most clearly shows. In this freer translation, the one saint asks:

[...] ‘quhare sal we
flesche get þis want to supple?’
þane his bruthire til hym sad:
‘in þe kirkzard zestrewen wes lad
ane ethiope, & zet his flesche
is caloure Inucht & als fres.’

þe cancryt flesche þai schure away,
& fillyt þar-of but delay,
& it enoyntit syne with slicht,
& slad one owte of his sight.

[Then said one: ‘where shall we get flesh to supply this lack?’ Then his brother said to him: ‘In the churchyard yesterday evening was laid an Ethiopian, and yet his flesh is warm enough and also fresh.’ The cancerous flesh they shore away and filled thereof without delay, and anointed it after with skill, and slipped out of his sight.]

Recalling the Latinate vocabulary of the *Legenda* more closely than its Middle English cousins (‘ut huic suppleamus’; ‘þis want to supple’), *The Scottish Legendary* sustains more fully the supplementary logic of the incarnative theory the miracle draws upon. Unlike its source, *The Scottish Legendary* sees the incarnative procedure through to its end: here is no leg transplant, rather the dead flesh is cut away and the dead man’s flesh is used to fill up the ‘hole’ in what is understood as an otherwise complete human form. In response to the question of where to get flesh to ‘supply’ the ‘want’ – that is, ‘to make up for, to compensate for’ (*MED*, s. v. ‘supplien’) the bodily ‘absence’ or ‘lack’ (*MED*, s. v. ‘want’) – the saint’s answer stresses, uniquely among these vernacular renderings, the liveliness of the dead man’s flesh: ‘his flesche / is caloure Inucht & als fres’.⁴¹ His flesh is still warm and fresh.

The liveliness of the Ethiopian’s flesh persists in spite of the death of his body. Like its radical difference from spermatric members, flesh in medieval understandings is simultaneously both proper to and separate from the body. Isidore of Seville’s influential encyclopaedia thus records: ‘in flesh there is always a body, but in a body there is not always flesh, for the flesh is what is alive, and this is a body’.⁴² A similar perception of flesh’s difference from the body emerges in the scholastic tradition: Albertus Magnus, for example (as Philip Reynolds summarises), understands that flesh ‘loses its definition (*ratio*) less than a homogeneous member

does, for dead flesh may still be called “flesh”, but a dead hand keeps neither the name nor the definition of hand’.⁴³ But if flesh can outlive the body, it is also perceived as a form of living death: encyclopaedias like *On the Properties of Things* record Remigius’s and Gregory’s explanation of the etymology of *caro* (the Latin for ‘flesh’) as “qwittir [putrid matter] or rotidnes”. So seiþ Remigius. And Gregor seiþ þat þe fleisch is swithe [quickly] chaungeable, and þerfore it rotiþ hasteliche [rots quickly]’.⁴⁴ In the surgical process of making flesh it is also possible to generate dead flesh: sometimes (as in suppuration) rotting the flesh is the very means to healing and restoring the body; at others rotten flesh is the undesirable consequence of faulty treatment. Following the authority of Galen, Chauliac instructs that to cure a ‘brused [contused]’ ulcer, it is necessary to ‘rote it and to turne it into quyttre [pus] and afterward to gendre neue flesche’. In contrast, Chauliac also warns against the use of medicines to ‘gendren flesche’ before cleansing the wound, since this will cause there to be ‘gendrede euel [rotten] fleisshe and dede [dead] flesche’.⁴⁵ Even dead flesh, it seems, is in some way animate.

In the exchange made between bodies, flesh is inserted in a body to which it does not belong: it is both proper to and other than, or exceeds, the individual. It can be fresh – living – in a dead body, and already dead in a body that still lives. The prosthesis formed by the dead man’s living flesh thus poses questions about the status of life and death when they are revealed to inhabit one another. In its prosthetic capacity, flesh reveals most starkly the ways in which, inextricably, death inhabits life, but also points to a community of the living and the dead, mediated here by the charity-driven action of the saints, that extends until it will be refashioned in the Last Judgement and the Resurrection.

Across all versions of the miracle, on awaking the man notices first the absence of pain and then, lighting a candle, sees that his leg is now whole. The *Legenda aurea* relates that: ‘Apponens itaque candela, cum in crure nil mali videret; cogitabat autem non ipse esse, qui erat, sed alius alter esse’ [Placing a candle nearby, therefore, when no wrong could be seen in the leg,

he thought it was not himself but another]. Likewise, *The Gilte Legende* records ‘he toke a candell, and whan he saw nothings in hys thigh, he thought he was not himself but that he was sum other’.⁴⁶ In *The Scottish Legendary* we are told the man ‘myslewand [doubting] zet [yet] þat it wes [was] he / wes mad hale [made whole] in sic [such] degre’. The prosthesis of flesh – completion in place of absence – brings about a failure to recognise the self.⁴⁷ In these textual accounts, the man’s self-estrangement arises from finding his rotten leg made whole: ‘cum in crure nil mali videret’; ‘he saw nothings in hys thigh’; ‘he / wes mad hale’. What, however, they remain silent about is the question of skin colour raised in the miracle account. The dead man from whom the flesh (or leg) is taken is from ‘Ynde’, he is an ‘Ethiope’, or a ‘Maurus [Moor]’. In other words, his skin is black. In the visual depictions of this miracle, such as that in a late thirteenth-century copy of the *Legenda aurea* preserved in Huntington Library MS 3027 (figure one), the exchange of flesh is always marked by colour: the white living man receives the dead man’s black leg.⁴⁸ So too do these visual depictions mark absence – the white man’s thigh, according to the textual account, is ‘sa consumyt [so consumed]’ or ‘wastid [...] nerehand away’ – with presence: in the Huntington manuscript, a whole white leg rests on the bottom frame; in other depictions the white man’s leg is shown joined to the black man’s body. If the written accounts of the miracle rely on flesh’s capacity to substitute for – to supplement, or to stand in the place of – through its being ‘in common’, these visual representations, in contrast, paradoxically point up the remnant: that which is not assimilable, an essential difference that means the black man’s leg does not completely coincide with the white man’s body. Writing on the implant, Roberto Esposito comments: ‘this is exactly what a prosthesis is: an outside brought inside; or an inside that sticks out; no longer kept inside the limits that traditional subjective identity made to coincide with skin’.⁴⁹ Disrupting the boundaries between life and death, flesh – in its capacity to substitute and stand in the place of, as well as its ‘in commonness’ – also disrupts subjective identity. In doing

so, the prosthesis of flesh here offers a potentially expansive, capacious model of community that transcends (racial) difference and binds self and other.

If ‘incarnatyf’ medicine, or surgical prosthesis, implicitly models forms of medieval community in the miracle of Cosmas and Damian, in Bridget of Sweden’s *Revelations* it is the metaphor through which Christ explicitly establishes and fashions the spiritual community of Christians as part of his own body. The familiar analogy of the organic body to the Christian body is thus reimagined in terms of prosthetic substitution and implantation into Christ’s arm. In so doing, the medical meanings of ‘incarnacioun’ blur with its theological possibility: Christ’s own Incarnation, through which he makes his flesh renewable daily, and through which he substitutes human flesh, emerges as profoundly prosthetic. However, at the same time that Christ’s arm shows the expansive reach of the prosthesis of flesh to model community in medieval thinking it also marks out its social, racial, and ideological limits.

Christ’s arms

In the *Revelations*, Bridget (d. 1373) is the vehicle for bringing God’s word of correction or encouragement to her contemporaries. As Claire Sahlin notes, ‘the overriding themes of the *Revelations* are Christ’s wrath against those who forget or disdain him and his loving acceptance of those who repent’.⁵⁰ In some ways then, the revelations are ultimately concerned with questions of inclusion within or exclusion from Christ’s body. Christian community as it appears in the *Revelations* is fractured and broken, and Christ is estranged from his own body in its figuration in the Church in the world. The spiritual, heavenly body of Christ is being fashioned with, at the same time as it is fashioned against, the earthly body of the Church. It is with this in mind that I want to read a series of visions that concern Christ’s arms as they appear in a fifteenth-century Middle English translation of the *Revelations*, known as the *Liber Celestis*. While the occasional nature of Bridget’s revelations resists systematisation, there are compelling

grounds for reading these brachial visions as engagements with and extensions of a specifically medieval prosthetic mode of thought.⁵¹

Book IV, Chapter 90 of the *Liber Celestis* announces its subject in a rubric which reads: ‘Criste tells to þe spouse how his frends are a[s] his arm and he, as a gude lecch [physician], cuttes away rotyn fleshe and transforme[s] þame [them] vnto hymselfe’. The vision itself elaborates (quoted in full):

Criste saide, ‘My frendes are as my arme, in þe whilke [which] are fyfe [five] þinges. Þe firste is þe skyn, þan fleshe, blode, bone and mergh [marrow]. Bot I do as a surgen þat cuttes away all þat is dede. So I take away fro my frends þe worldly coueytise [covetousness] and lustes of fleshe, and I putt to þame [them] helpe of my myght, as it were mergh, for ryght as wythouten mergh is no strenght in þe arme, right so wythouten my might is mannes might nozt [nothing]. And þis mergh is in þe bone þat is sade [hard, rigid, firm]. So sall [shall] my frendes knaw [know] my myght and besy þam to wirke [work] þe gude [good] wyth a lastyng will. Þe third is þe blode, þat bytokens a gude will; and þe fleshe paciens, þat is softe of þe selfe; and þe skyn bytokens lufe [love], in token þat þai suld [should] lufe nopinge so mykyll [much] as me. And þan I knyht þam fulli to myselfe, and hase þame all in me.’⁵²

The revelation Bridget has here – that Christ’s friends are as his arm – draws on the familiar analogy of the human body with the body of Christ (that is the Church), of which Christ is the head and in which, in the model made standard by St Paul, each Christian performs different roles in the community, just as the hands, arms, feet, and so on, do in the body.⁵³ Bridget’s recourse to the analogy of the body’s simple members, however, is untypical and defamiliarises the way in which the metaphor functions, emphasising less the co-operation and co-dependence of parts to the whole than the supplementary and vicarious nature of Christ’s work of salvation – that is, its prosthetic principles of substitution and insertion, and its primary medium of flesh.

Anatomically speaking, arms (like legs, feet, etc.) are compound (non-uniform) members made up of the simple (or uniform) members of the body. *On the Properties of Things* thus records that the arms are: ‘clothid and keuered [covered] wiþ skynne, brawne [muscle], and strenges [ligaments] wiþ fleisch among, þat þey be noust esilche ihert [not easily hurt] and igreued [injured] withoute’.⁵⁴ Christ’s arm, as the *Liber* asserts, is likewise made up of skin, flesh, blood, bone, and marrow. In Bridget’s revelation, the process through which Christians are made a part of the body of Christ is defined as one of surgical prosthesis. As the rubric emphasises, being joined to the body of Christ first requires Christ as ‘lecche’ or ‘surgen’ (as he is termed in the revelation itself) to cut away dead, rotten flesh – that is, ‘worldly coueytise and lustes of fleshe’. Christ then fills up the holes and hollows with his own flesh, and inserts – implants – his own simple members into those of his friends: he adds his marrow (‘I putt to þame helpe of my myght, as it were mergh’), bones, blood, flesh, and skin in order to supplement and enhance their strength, will, patience, and love. Flesh here is capacious: it is both love of the world and sinful humanity in need of refashioning; but it also stands in for Christ’s patience, because flesh is ‘softe of þe selfe’ – ‘softe’ suggesting (*MED*, s. v.) ‘yielding to touch or pressure’, or that which suffers. Finally, Christ then knits – just as regenerative medicine knits, grafts or solders flesh together – his friends to his arm.

The analogy of the organic body thus instantiates multiple prosthetic instances: Christ as surgeon practices ‘incarnatyf’ medicine, cutting away rotten flesh from his arm, inserting new flesh and enhancing the arm’s simple members by inserting his into it, before knitting it together to create a hybrid prosthesis in his own body. So too does surgical prosthesis begin to blur into – indeed, provide a model for – the ongoing work of Christ’s Incarnation and Crucifixion, in which he takes on human flesh in order to substitute it with his own, an act which is renewed daily in the sacrament of the Eucharist. Thinking through the analogy of the organic body to the communal body in terms of simple rather than compound members fundamentally refigures the

model of community it offers: incorporation into the body of Christ is achieved through a prosthetic process of supplementation, addition, and enhancement.

Two chapters later, Christ revisits this revelation and offers Bridget a second reading of it. The rubric this time reads ‘Criste warned þe spouse to haue perseuerence in vertuse [virtue], folowyng þe life of sayntes’. Christ now explains (again, this is the entirety of the revelation given):

I saide þe [to you] þat my frendes are myne arme. My godehede is as it were þe mergh [marrow], for wythouten it may no man life. Mi manhede is bones, þat suffird so stalworthli [bravely], painfulli, passion. Þe skyn is my moder [mother] and þe sayntes of heuen, þat [who] prayes for þe synfull to couer [cover] þer [their] syn, as þe skyn coueres þe fleshe. Þe blode þat is stirrynge [flowing] in þe body is my gode goste [the Holy Ghost] þat stires [stirs] þam to all gude: and þus am I knyt to my frendes.⁵⁵

In this second reading, the simple members, which had first been linked to qualities founded principally in ‘natural’ physical properties (i.e. bones are strong, flesh ‘suffers’) are now triangulated with Christ’s triune nature (the Godhead, manhood, and Holy Ghost), and with the spiritual community of Mary and the saints. Marrow, bones, skin, and blood are all attributes of Christ, Mary, or the saints. Flesh alone remains radically different: it stands for the human and for human sin in an arm otherwise made up of divine qualities.⁵⁶ The intercessory prayers of Mary and the saints cover over sin, just as skin covers the flesh. Here flesh is here once again the subaltern substance of prosthesis: Christ transplants his own sinless living flesh in order to replace our sinful dead flesh.

The revelation that Christ’s friends are made into his arm through a process of surgical prosthesis, however, raises questions that neither of Christ’s glosses answer. Who or what makes up the rest of Christ’s body? Who or what is excluded from this body? The *Liber Celestis* makes clear that the category of Christ’s friends is not one to which every Christian automatically

belongs, but is rather a more exclusive group, which Bridget is urged to join – as the rubric suggests – through imitating the saints. Elsewhere, the *Liber* divides the world into pagans and Jews (and those pagans and Jews who are virtuous and who, if they but knew, would believe), and evil Christians and those Christians who follow God’s will. It is this last category – lamented as all too small – along with the saints and Mary who constitute Christ’s friends. The metaphor of prosthesis in the *Liber*, while it relies on the openness of flesh as a category, also imposes limits on Christ’s body, determining what can be incorporated into it and what is to be left outside of it.

A call to Bridget to become a part of Christ’s arm is, in fact, first issued at the very opening of the *Liber Celestis*. This example moves away from the model of ‘incarnatyf’ medicine, but in so doing provides a postscript to these other fragments for a medieval theory of prosthesis. In Book I, Chapter 3, Christ voices a familiar complaint: many now hate him; the devil ‘pai haue and loues [they have and love]’ in his place. In contrast, Christ urges Bridget:

Wharefore if þou will loue me of all þi [your] herte and noþinge desire bot [except] me, I sall [shall] drawe þe to me bi charite, as þe precious stone called magnes [magnet] drawes iren [iron], and I sall set þe within mi arme, þe whilke [which] is so strange [strong] þat none mai strech it oute, so starke [rigid] þat none mai bowe it, so swete þat it passes all þinges of sauoure, so þat it mai haue no likenes to worldli delites [delights].⁵⁷

Refiguring the natural organic model of the body, Christ’s arm takes on and incorporates what is not natural to it, the properties of stone and metal: he draws human flesh to him as a magnet does iron. Drawing her thus by the magnet of charity, or love, Christ will set Bridget within his arm. This arm is so strong none may stretch it or bend it (though oddly it can also be tasted). As such, incorporation into the body of Christ in this moment is achieved through the binding of the natural with the artificial – it is almost technological, almost bionic.

Medieval understandings of magnets and iron can be used to gloss further the limits of prosthesis as a metaphor for Christian community. First, magnets both attract and repel; secondly, iron figures flesh. *On the Properties of Things* catalogues the qualities of iron and magnets (referred to here as ‘adamas’) in Book XVI:⁵⁸ ‘Iren haþ accord [has an affinity] wiþ þe stoon [stone] adamas, and so þat stoon adamas draweþ iren to itself’. More particularly, of the magnet we are told there are two kinds: one which draws iron to it and another, from Ethiopia, that ‘forsakeþ iren and dryueþ [drives] it away fro himself’.⁵⁹ If Bridget’s revelations make clear the exclusivity of membership of Christ’s body, the idea that Christ’s love-as-magnet might repel some as it attracts others further problematises it. This is made strikingly clear in Sermon 14 in a collection preserved in Oxford, Bodley MS 649, which cites the definition of magnets from *On the Properties of Things* before going on to assert:⁶⁰ ‘this powerful magnet is nothing else except the king over all gods, the king of kings, Christ Jesus, who has two poles [...]. One pole is marvelous and very powerful in attracting’, uniting the Christian to Christ ‘through grace and good life’. The other pole, in contrast, ‘is very sharp and terrifying, and this is the pole of justice’. What the sermon-writer goes on to make clear is that iron stands for human flesh; the touching of the magnet and flesh, in turn, figures the union of God and man effected in the Incarnation and made possible to all through the Crucifixion.⁶¹ However, if flesh is the radical material of supplement and exchange in the surgical tradition of prosthesis, as it is in the miracle of Cosmas and Damian and in the theology of the Incarnation, such prosthetic possibility is closed down in the *Liber*. In translating flesh to iron, the *Liber* puts limits on who and what can be inserted into Christ’s magnetic arm, which repels at the same time as it attracts.

The transference in Bridget’s brachial visions from the analogy of the human body’s simple members to that of non-human metal and stones reinforces the ways in which medieval prosthetic thought always already complicates questions about the matter of the body. Together these fragments suggest a medieval theory of surgical prosthesis centred on the art of making

flesh. Within this theory, flesh itself acts as a prosthetic substitute for absent or defective parts of the body. It can do so because of its radical difference – its sanguine as opposed to spermatic nature – from the rest of the body. As this prosthetic logic is taken up outside of the surgical tradition, flesh, in substituting and supplementing, disrupts the boundaries of the self and other, inside and outside, life and death, in ways that continue to show through: flesh transgresses these binaries through its capacity both to occupy the place of each and to convey them into the body. Flesh as prosthesis thus acts, as David Wills asks it to, as the figure ‘for differential [...] relations in general’.⁶² The examples of the Ethiopian’s leg and Christ’s arm also point to a prosthetic imaginary in which flesh is understood as detachable and exchangeable – not only within the body, but between bodies, between God and man. This prosthetic imaginary has points of contact with, and offers alternative ways of thinking about, both contemporary critical theories of prosthesis and philosophies of flesh. Medieval flesh emerges within this imaginary (as it does in contemporary pro-flesh philosophies) as a peculiarly open category: it is what is common between the human and the material of the world. Medieval prosthesis, or ‘incarnatyl’ medicine, provides a powerful metaphor for modelling communities – of the living and the dead in the miracle of Cosmas and Damian, and of God and man in Bridget’s *Liber Celestis*, in which Christ’s own Incarnation becomes a paradigmatic instance. While marked (in the visual tradition) by the difference of skin colour, the prosthesis of the Ethiopian’s leg offers a vision for relations between self and other that joins the living and the dead in a community of mutual dependence and of charity-driven action – a universal economy that emphasises sameness while articulating difference. In the *Liber*, the revelation that Christ’s friends make up his arm shows the profound reach of prosthesis to fashion community at the same time as it marks out and circumscribes its limits.

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Notes

¹ *The New World of Words: or, universal English dictionary* (ed. John Kersey), 6th edn (London: Printed for J. Phillips [...], 1706), ESTC T101516. Cited in *OED*, s. v. ‘prosthesis’.

² *MED*, s. v. ‘the growth of new tissue in a wound or sore; the process or action of healing a wound’.

³ Robert von Fleischhacker (ed.), *Lanfrank’s ‘Science of Chirurgie’*, EETS os 102 (London: Kegan Paul, Trench, Trübner, 1894), pp. 27–8. Another Middle English treatise, Margaret S. Ogden (ed.), *The Cyrurgie of Guy de Chauliac*, EETS os 265 (London: Oxford University Press, 1971), names these ‘corny or knotty flesche’, ‘brawny’ (the most prevalent), and ‘symple flesche and pure’ (p. 32). John Trevisa’s translation, *On the Properties of Things: John Trevisa’s Translation of Bartholomaeus Anglicus ‘De Proprietatibus Rerum’*, ed. M.C. Seymour and others (Oxford: Clarendon Press, 1975), giving the authority here as ‘Constantine’, similarly gives these three taxonomies, but names them ‘kernelly’, ‘brawny’, and ‘gristle’, 3 vols. Vol. I, p. 281.

⁴ Albert the Great [Albertus Magnus], *On Animals: A Medieval ‘Summa Zoologica’*, trans. Kenneth F. Kitchell and Irven Michael Resnick (Baltimore: The John Hopkins University Press, 1999), 2 vols. Vol. I, p. 77 (1.1.6). The Latin is from Albertus Magnus, *De Animalibus Libri XXVI, Nach der Kölner Urschrift*, ed. Herman Stadler (Munster: Aschendorffsche Verlagsbuchhandlung, 1916, 1920), 2 vols. Vol. I, p. 32. Cf. Avicenna, *The Canon of Medicine*, adapted by Laleh Bakhtiar from translations of Volume I by O. Cameron Gruner and Mazar H. Shah, correlated with the Arabic by Jay R. Crook with notes by O. Cameron Gruner (Chicago: Great Books of the Islamic World,

1999), which records that flesh ‘fills up the spaces in the tissues left within the organs, thus making them firm and solid’, p. 48.

⁵ Jacques Derrida’s writing on the relationship between language and writing (e.g. *Of Grammatology*, trans. Gayatri Chakravorty Spivak (Baltimore: Johns Hopkins University Press, 1976)), and the idea of the supplement has been particularly influential; David Wills takes up this idea very specifically in *Prosthesis* (Stanford: Stanford University Press, 1995), exploring the relationship between writing (and the act of criticism) and a literal prosthetic leg worn by his father. Despite recognising Paré’s characterisation of surgical practice as ‘prosthetic’, Wills never identifies this explicitly with an art of making flesh.

⁶ On medieval ‘matter’, see further Caroline Walker Bynum, *Christian Materiality: An Essay on Religion in Late Medieval Europe* (New York: Zone, 2011).

⁷ Derrida, *Of Grammatology*, p. 145.

⁸ This opinion, though not without criticism and modification in the medieval period, is widely cited. Cf. Danielle Jacquart, ‘À la recherche de la peau dans le discours médical de la fin du Moyen Âge’, *Micrologus*, 13 (2005), pp. 493-510 (p. 498) ; and Katie L. Walter, ‘The Form of the Formless: Medieval Taxonomies of Skin, Flesh and the Human’ in Katie L. Walter (ed.), *Reading Skin in Medieval Literature and Culture* (New York: Palgrave Macmillan, 2013), pp. 119-40.

⁹ *The Cyrurgie of Guy de Chauliac*, p. 29.

¹⁰ *Lanfrank’s ‘Science of Chirurgie’*, pp. 32-3.

¹¹ Cf. *Lanfrank’s ‘Science of Chirurgie’*, p. 32.

¹² *The Cyrurgie of Guy de Chauliac*, p. 4. Cf. *Lanfrank’s ‘Science of Chirurgie’*, p. 18.

¹³ On this surgical craft, see further Karine van’t Land, ‘The Solution of Continuous Things: Wounds in Late Medieval Medicine and Surgery’ in Anne Kirkham and Cordelia Warr (eds), *Wounds in the Middle Ages* (Farnham: Ashgate, 2014), pp. 89-108. See in particular her account of Avicenna’s teaching on making new flesh in wounds, pp. 99-100.

¹⁴ *The Cyrurgie of Guy de Chauliac*, pp. 190, 191. For synonyms and associated terms, see pp. 211, 291, 600.

¹⁵ *Lanfrank's 'Science of Chirurgie'*, p. 346 (for Middle English and Latin).

¹⁶ *The Cyrurgie of Guy de Chauliac*, p. 214. For the Latin see: Guigonis de Caulhiaco [Guy de Chauliac], *Inventarium sive chirurgia Magna, Volume 1: Text*, ed. Michael R. McVaugh (Leiden: E. J. Brill, 1997), p. 160. McVaugh, vol II, pp. 123-4 gives a useful overview of Chauliac's response to this Galenic teaching.

¹⁷ *The Cyrurgie of Guy de Chauliac*, p. 212.

¹⁸ *Ibid.*, pp. 602-3.

¹⁹ *Lanfrank's 'Science of Chirurgie'*, p. 343.

²⁰ *Ibid.*, p. 344.

²¹ *The Cyrurgie of Guy de Chauliac*, p. 185; McVaugh (ed.), p. 140.

²² *The Cyrurgie of Guy de Chauliac*, p. 600. Cf. p. 215. For the Latin, see McVaugh (ed.), p. 162.

²³ *Lanfrank's 'Science of Chirurgie'*, p. 32. For examples of the widespread use of this term in Middle English medical texts, see the *MED* entries for 'souden', 2(a).

²⁴ *The Cyrurgie of Guy de Chauliac*, pp. 190-1. Cf. *Lanfrank's 'Science of Chirurgie'*, p. 348.

²⁵ *Ibid.*, pp. 191-3.

²⁶ In this way, medieval understandings of flesh resonate with contemporary pro-flesh philosophies. For example, see particularly Roberto Esposito, *Bios: Biopolitics and Philosophy*, trans. Timothy Campbell (Minneapolis: University of Minnesota Press, 2008).

²⁷ Richard Hamer (ed.), *Gilte Legende*, EETS os 339 (Oxford: Oxford University Press, 2012), 3 vols. Vol. II, p. 705.

²⁸ Mary Mcleod Banks (ed.), *An Alphabet of Tales: an English Fifteenth-Century Translation of the Alphabetum narrationum*, EETS os 126-7 (London: K. Paul, Trench, Trübner & Co, 1904-5), 2 vols. Vol. I, pp. 153-4.

²⁹ W.M. Metcalfe (ed.), *Legends of the Saints in the Scottish Dialect of the Fourteenth Century* (Edinburgh: William Blackwood & Sons, 1896), 2 vols. Vol. II, pp. 292-303.

³⁰ Jacobi a Voragine [Jacobus de Voragine], *Legenda aurea: vulgo historia Lombardica dicta*, ed. Theodore Graesse (Vratislaviae: Guilelmum Keobner, 1890), p. 639.

³¹ The detail of the man being ‘begare & crepele’ is unique to the *Scottish Legendary* account. I give the Latin in square brackets from Graesse’s edition.

³² Again, the detail ‘to cut ded flesche’ is unique to the *Scottish Legendary*. *An Alphabet of Tales* simply records ‘oyntementtis’ and ‘playsters’.

³³ *The Cyrurgie of Guy de Chauliac*, p. 212.

³⁴ *Ibid.*, p. 212.

³⁵ *Lanfrank’s ‘Science of Cirurgie’*, p. 38.

³⁶ The miracle of Cosmas and Damian is unique in its substitution of legs, but there are other miracles involving restoration of missing limbs. Cf. for example, the miracle of the Virgin recorded in Vernon MS, f. 125v in which a man who has had his leg amputated has it restored by the Virgin who ‘hondelede hym bi þe kne / And drouh out þer of a newe leg / As furst was won to be’.

³⁷ See, for example, the discussion in Esposito, *Bios*.

³⁸ See, for example, Jean-Luc Nancy, ‘The Intruder’, in *Corpus*, trans. Richard A. Rand (Fordham: Fordham University Press, 2008).

³⁹ Cf. with *Gilte Legende*: ‘Where shull we take nwe flesshe for to sette in the place where we take awaye the rotyn flesshe?’, etc., p. 705.

⁴⁰ Leonard Barkan, ‘Cosmas and Damian: Of Medicine, Miracles, and the Economies of the Body’ in Stuart J. Youngner, Renée C. Fox and Laurence J. O’Connell (eds), *Organ transplantation: meanings and realities* (Madison: University of Wisconsin Press, 1996), pp. 221-51 (p. 243).

⁴¹ *DSL*, s. v. ‘callour’: ‘Of fish, flesh, etc.: Fresh; showing no signs of flabbiness or staleness’; s. v. ‘caloure’: ‘heat’.

⁴² Stephen A. Barney and others (trans.), *The Etymologies of Isidore of Seville* (Cambridge: Cambridge University Press, 2006), XI.i.17.

⁴³ Phillip Lyndon Reynolds, *Food and the Body: Some Peculiar Questions in High Medieval Theology* (Leiden: Brill, 1999), p. 273.

⁴⁴ *On the Properties of Things: John Trevisa’s Translation*, vol. I, p. 281.

⁴⁵ *The Cyrurgie of Guy de Chauliac*, pp. 284, 280.

⁴⁶ *An Alphabet of Tales* notes that he looks ‘and his the [thigh] aylid nothyng’, though omits the detail of alterity.

⁴⁷ The consequences of implants or modern prostheses are understood to create this same ‘inability to recognise one’s own identity’, Roberto Esposito, *Immunitas: The Protection and Negation of Life*, trans. Zakiya Hanafi (Cambridge: Polity, 2011), p. 152.

⁴⁸ There is an extensive iconographic tradition representing the exchange of legs in this miracle in terms of skin colour. See further, for example, Fra Angelico, *The Healing of Justinian by Saints Cosmas and Damian*, ca. 1438-40), Museo di san Marco, Florence; Master of the Rinuccini Chapel (Matteo di Pacino), *Saints Cosmas and Damian Healing Justinian’s Leg* (ca. 1370–75), North Carolina Museum of Art.

⁴⁹ Esposito, *Immunitas*, p. 149.

⁵⁰ Claire L. Sahlin, *Birgitta of Sweden and the Voice of Prophecy* (Woodbridge: Boydell, 2001), p. 21.

⁵¹ B.P. McGuire notes ‘Bridget’s teaching does not lend itself to systematization’, ‘Friendship in Birgitta of Vadstena’ in Alf Härdelin and Mereth Lindgren (eds), *Heliga Birgitta – budskapet och förebilden* (Stockholm: Almqvist & Wiksell, 1993), pp. 153-74 (p. 168); Roger Ellis similarly observes that they are ‘occasional pieces’, which ‘insist upon being read as a series of separate and miraculous pronouncements’, “Flores ad Fabricandam Corona”: An Investigation into the

Uses of the Revelations of St Bridget of Sweden in Fifteenth-Century England', *Medium Aevum*, 52 (1983), pp. 163-86 (p. 163).

⁵² Roger Ellis (ed.), *The Liber Celestis of St Bridget of Sweden*, EETS os 291 (Oxford: Oxford University Press, 1987), p. 334. See Denis Searby (trans.) and Bridget Morris (intro.), *The Revelations of St Birgitta of Sweden* (Oxford: Oxford University Press, 2006), 4 vols, for a critical edition of the Latin text. See Vol. II, p. 169.

⁵³ For the biblical analogy, see I Cor. 12.12-28, Col. 1.1, Eph. 4.30. On the standard account of the shift in use of the terms *Corpus Christi* and *Corpus mysticum*, see Ernst H. Kantorowicz, *The King's Two Bodies: A Study in Mediaeval Political Theory* (Princeton: Princeton University Press, 1957). See also Sarah Beckwith, *Christ's Body: Identity, Culture and Society in Late Medieval Writings* (London: Routledge, 1993) on Christ's body as both inclusive and exclusive, cohesive and divisive; and the discussion of Christ as surgeon in Virginia Langum, 'The Wounded Surgeon: Devotion, Compassion and Metaphor in Medieval England' in Larissa Tracy and Kelly DeVries (eds), *Wounds and Wound Repair in Medieval Culture* (Leiden: Brill, 2015), pp. 269-90.

⁵⁴ *On the Properties of Things: John Trevisa's Translation*, vol. I, p. 220.

⁵⁵ *The Liber Celestis of St Bridget*, p. 335.

⁵⁶ This reading differs from that of the Latin edition, in which Mary is flesh.

⁵⁷ *The Liber Celestis of St Bridget*, p. 10. Cf. *The Revelations of St Birgitta*, vol. I, p. 56.

⁵⁸ See *MED*, s. v. 'adamaunt', and 'magnes'.

⁵⁹ *On the Properties of Things: John Trevisa's Translation*, vol. II, p. 849.

⁶⁰ Patrick Horner (ed. and trans.), *A Macaronic Sermon Collection from Late Medieval England: Oxford, MS Bodley 649* (Toronto: PIMS, 2006), p. 272. Cf. sermon 10. See also *The Liber Celestis of St Bridget*, p. 246.

⁶¹ Horner (ed.), *A Macaronic Sermon*, p. 370.

⁶² Wills, *Prosthesis*, p. 14.